

# LONDON- WEST MIDLANDS ENVIRONMENTAL STATEMENT

## Volume 5 | Technical Appendices

CFA3 | Primrose Hill to Kilburn (Camden)

**Operational assessment (SV-004-003)**

Sound, noise and vibration

November 2013

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Department  
for Transport

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## Appendix SV-004-003

Environmental topic:	Sound, noise and vibration	SV
Appendix name:	Operation assessment	004
Community forum area:	Primrose Hill to Kilburn	003

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# 1 Introduction

## 1.1 Structure of the sound, noise and vibration appendices

- 1.1.1 The sound, noise and vibration appendices comprise four sections. The first of these details the methodology used (Appendix SV-001-000) and relates to the sound, noise and vibration assessment for all community forum areas (CFA).
- 1.1.2 For the Primrose Hill to Kilburn community forum area (CFA03), the other three sections are as follows:
- baseline sound, noise and vibration (Appendix SV-002-003);
  - construction sound, noise and vibration (Appendix SV-003-003); and
  - operational sound, noise and vibration (Appendix SV-004-003) (this appendix).
- 1.1.3 The outcomes of this assessment are summarised in Volume 2: CFA03 Report, Chapter 11 Sound, Noise and Vibration.
- 1.1.4 Maps referred to throughout the sound, noise and vibration appendices are contained in the Volume 5 sound, noise and vibration map book.
- 1.1.5 This appendix presents the likely noise and vibration impacts, effects and significant effects arising from the operation of the Proposed Scheme for the Primrose Hill to Kilburn area on:
- people, primarily where they live ('residential receptors') in terms a) individual dwellings and b) on a wider community basis, including any shared community spaces; and
  - community facilities such as schools, hospitals, places of worship, and also commercial properties such as offices and hotels, collectively described as 'non-residential receptors' and 'quiet areas'.
- 1.1.6 The assessment of likely impacts, effects and significant effects from operational noise and vibration on agricultural, community, ecological or heritage receptors and the assessment of tranquillity are presented in the following documents within Volume 5:
- Agriculture, forestry and soils      Appendix AG-001-003
  - Community                                  Appendix CM-001-003
  - Ecology                                      Appendix EC-005-001
  - Heritage                                      Appendix CH-003-003
  - Landscape and Visual                  Appendix LV-001-003

## 1.2 Evaluation of impacts and effects

- 1.2.1 This appendix provides a quantitative assessment of operational noise and vibration impacts and effects and a qualitative assessment of likely significant effects, based on the impacts and effects identified and other local context information consistent with the scope and methodology defined for the Proposed Scheme.

- 1.2.2 Indirect effects arising from permanent changes in traffic patterns on the existing road and rail networks as a consequence of the Proposed Scheme are also reported in this appendix, where they would occur within the study area as defined in Volume 5: Appendix SV-001-000.
- 1.2.3 Route-wide impacts, effects and significant effects associated with noise or vibration from the operation of the Proposed Scheme are reported in Volume 3.
- 1.2.4 Off-route effects of noise or vibration arising from the operation of the Proposed Scheme, including those likely to arise from permanent changes in traffic patterns on roads or railways outside of the study area for direct effects are reported in Volume 4.
- 1.2.5 In undertaking the assessment of sound, noise and vibration, consistent with EIA Regulations and emerging National Planning Practice Guidance<sup>1</sup> a differentiation between impacts effects, adverse effects and significant effects is made. Further information is provided in Volume 5: Appendix SV001-000.
- 1.2.6 The assessment of impacts has been undertaken at assessment locations that are representative of a number of dwellings or other sensitive receptors. The Assessment Locations employed in this assessment are presented on map series Sv-02 in the CFA03 Volume 5 sound, noise and vibration map book.

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<sup>1</sup> National Planning Practice Guidance – Noise <http://planningguidance.planningportal.gov.uk> ; refer to the table summarising noise exposure hierarchy

## 2 Scope, assumptions and limitations

### 2.1 Regional and local policy guidance

2.1.1 The policy framework for sound, noise and vibration is set out in Volume 1 and in Appendix SV-001-000. As part of the engagement with local authorities through the Planning Forum Sub Group (Acoustics) information regarding any specific local planning guidance in respect of noise and vibration has been requested. Whilst no information has been received for this study area via the Planning Forum Sub Group (Acoustics) the following local policy guidance on noise and vibration has been identified:

- London Borough of Camden - Development Policy DP28 - Noise and vibration;
- London Borough of Camden - Replacement Unitary Development Plan - Adopted June 2006;
- City of Westminster - Core Strategy - Local Development Framework - Adopted January 2011; and
- City of Westminster - Unitary Development Plan - Adopted January 2007.

2.1.2 This guidance has been considered as part of formulating the detailed application of the impact and significance criteria set out in Volume 5: Appendix SV-001-000.

### 2.2 Engagement

2.2.1 Details of engagement on a route-wide basis with the local and county authorities' Environmental Health Practitioners via the Planning Forum Sub Group - Acoustics, is set out in Volume 1.

2.2.2 Engagement with communities has been via the Community Forums, as set out in Volume 1. In respect of sound, noise and vibration the following discussions have taken place:

- general discussions in respect of local issues, including possible ways to avoid and mitigate the potential impacts of noise or vibration
- September / October 2012; a specific presentation about sound, noise and vibration with discussion afterwards with one of the project team specialists;
- November / December 2012; specific request for the Community Forum to propose baseline sound monitoring locations;
- January / February 2013; feedback to the Community Forum on any proposed baseline monitoring locations; and
- verbal / written response to questions on sound, noise and vibration.



## **2.3 Methodology**

- 2.3.1 The methodology used for the assessment of airborne sound, ground-borne sound and vibration impacts and the determination of significant effects is defined in the Scope and Methodology Report (SMR) (Volume 5: Appendix CT-001-000/1), is clarified in a number of areas by the SMR addendum (Volume 5: Appendix CT-001-000/2). Further information is contained in Volume 5: Appendix SV-001-000.

## **2.4 Assumptions**

- 2.4.1 Route-wide assumptions are outlined in Volume 1, Section 8, and are further detailed in Volume 5: Appendix SV-001-000. Local assumptions that apply to the assessment of operational sound noise and vibration within this CFA are set out in Volume 2: Report 03.

## **2.5 Local limitations**

- 2.5.1 None.

## **3 Environmental baseline**

### **3.1 Existing baseline**

- 3.1.1 Details of the baseline data collection and the methodology are given in Appendix SV-001-000 and specifically for this study area in Appendix SV-002-003. The majority of receptors adjacent to the line of the route are not currently subject to appreciable vibration and therefore vibration at all receptors has been assessed using the absolute vibration criteria as described in Volume 5: Appendix SV-001-000.

### **3.2 Future baseline**

- 3.2.1 The operational sound, noise and vibration assessment assumes a baseline year of 2026. The approach to scaling the baseline from the survey year to 2026 is presented in Appendix SV-001-000 and specifically for this CFA in Appendix SV-002-003.

## 4 Effects arising during operation

### 4.1 Introduction

4.1.1 The assessment is reported first for ground-borne sound and vibration and then for airborne sound. Under each of these headings, the results of the quantitative identification of impacts and effects are presented. This is followed by the identification of significant effects and the evidence used to support these conclusions.

4.1.2 The structure of this assessment report is:

- Avoidance and mitigation measures
- Quantitative identification of impact and effects
  - Ground-borne sound and vibration
    - Residential
    - Non-residential
- Assessment of impacts and effects
  - Residential receptors: direct effects – dwellings
  - Residential receptors: direct effects – communities
  - Residential receptors: indirect effects
  - Non-residential receptors: direct effects
  - Non-residential receptors: indirect effects
  - Cumulative effects from the proposed scheme and other committed development.

### 4.2 Avoidance and mitigation measures

4.2.1 These are set out in Volume 2: Report 03.

### 4.3 Quantitative identification of impacts and effects

#### Ground-borne noise and vibration

4.3.1 Assessment locations defined for the quantitative assessment of impacts are shown on map series SV-02 in the CFA03 Volume 5 sound, noise and vibration map book.

4.3.2 For each Assessment Location, the assessment results for residential and non-residential receptors are presented in Table 1. Explanation of the information in Table 1 is provided in Appendix SV-001-000, with the following additional notes.






B	For non-residential receptors further detail about the type of effect is set out in the text of Volume 5: Appendix SV-001-000.
NA	Type of effect - Generally no adverse effect
A	Type of effect - Adverse effect
S	Type of effect - Significant adverse effect
VDV	Vibration Dose Value
~	The forecast adverse effects are not considered to be significant on a community basis (further information on methodology is provided in Volume 5: Appendix SV-001-000).
^	The impact methodology has identified a potential significant effect at this receptor which based upon further qualitative information is not considered to be a likely significant effect. Please refer the end of this Appendix for further information.
	Where the significant effect column is highlighted in pink, then a significant effect is identified at the referenced residential community area, or individual receptor.
	Yellow denotes a low ground-borne noise impact or a minor ground-borne vibration impact
	Orange denotes a medium ground-borne noise impact or a moderate ground-borne vibration impact
	Red denotes a high ground-borne noise impact or a major ground-borne vibration impact
	Dark red denotes a very high ground-borne noise impact

Table 1: Ground-borne sound and vibration levels, noise and vibration impacts and effects

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
620573	Greville Mews, Kilburn	23	0.09	0.04	-	10	NA	R	T	-	-	-	-	
620574	Kilburn High Road, London	16	0.05	0.03	-	1	NA	R	T	-	-	-	-	
620575	Springfield Lane, London	19	0.06	0.03	-	24	NA	R	T	-	-	-	-	
620576	Springfield Lane, London	18	0.06	0.03	-	15	NA	R	T	-	-	-	-	
620577	Springfield Lane, London	19	0.06	0.03	-	24	NA	R	T	-	-	-	-	
620578	Kilburn High Road, London	10	0.04	0.02	-	18	NA	R	T	-	-	-	-	
620586	Greville Mews, London	15	0.05	0.03	-	1	NA	R	T	-	-	-	-	
620587	Greville Mews, London	15	0.05	0.03	-	1	NA	R	T	-	-	-	-	
620588	Greville Road, London	13	0.05	0.02	-	12	NA	R	T	-	-	-	-	
620589	Springfield Lane, London	21	0.08	0.04	-	19	NA	R	T	-	-	-	-	
620590	Mortimer Crescent, London	16	0.05	0.03	-	30	NA	R	T	-	-	-	-	
620591	Greville Road, London	11	0.04	0.02	-	102	NA	R	T	-	-	-	-	
620603	Mortimer Crescent, London	12	0.04	0.02	-	8	NA	R	T	-	-	-	-	
620605	Belsize Road, London	10	0.04	0.02	-	1	NA	R	T	-	-	-	-	
620607	Langtry Road, London	12	0.04	0.02	-	7	NA	R	T	-	-	-	-	
620609	Mortimer Crescent, London	16	0.05	0.03	-	124	NA	R	T	-	-	-	-	
620610	Mortimer Place, London	20	0.06	0.03	-	81	NA	R	T	-	-	-	-	
620611	Springfield Walk, London	13	0.04	0.02	-	1	NA	R	T	-	-	-	-	
620613	Mortimer Crescent, London	11	0.04	0.02	-	30	NA	R	T	-	-	-	-	
620614	Mortimer Crescent, London	12	0.04	0.02	-	16	NA	R	T	-	-	-	-	
620616	Mortimer Crescent, London	21	0.07	0.03	-	20	NA	R	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
620617	Mortimer Crescent, London	18	0.06	0.03	-	2	NA	R	T	-	-	-	-	
620618	Mortimer Crescent, London	12	0.04	0.02	-	15	NA	R	T	-	-	-	-	
620619	Abbey Road, London	20	0.06	0.03	-	12	NA	R	T	-	-	-	-	
620620	Abbey Road, London	16	0.05	0.03	-	17	NA	R	T	-	-	-	-	
620621	Abbey Road, London	10	0.04	0.02	-	13	NA	R	T	-	-	-	-	
620623	Mortimer Crescent, London	10	0.04	0.02	-	5	NA	R	T	-	-	-	-	
620624	Abbey Road, London	20	0.07	0.03	-	102	NA	R	T	-	-	-	-	
620626	Abbey Road, London	10	0.04	0.02	-	30	NA	R	T	-	-	-	-	
620627	Abbey Road, London	9	0.03	0.02	-	26	NA	R	T	-	-	-	-	
620628	Boundary Road, London	14	0.05	0.02	-	20	NA	R	T	-	-	-	-	
620629	Abbey Road, London	12	0.04	0.02	-	22	NA	R	T	-	-	-	-	
620630	Ainsworth Way, London	20	0.06	0.03	-	18	NA	R	T	-	-	-	-	
620631	Ainsworth Way, London	15	0.05	0.02	-	70	NA	R	T	-	-	-	-	
620632	Ainsworth Way, London	21	0.07	0.03	-	12	NA	R	T	-	-	-	-	
620633	Boundary Road, London	14	0.05	0.02	-	24	NA	R	T	-	-	-	-	
620634	Rowley Way, London	13	0.04	0.02	-	60	NA	R	T	-	-	-	-	
620635	Rowley Way, London	11	0.04	0.02	-	50	NA	R	T	-	-	-	-	
620636	Rowley Way, London	11	0.04	0.02	-	80	NA	R	T	-	-	-	-	
620637	Rowley Way, London	12	0.04	0.02	-	80	NA	R	T	-	-	-	-	
620638	Rowley Way, London	16	0.05	0.03	-	36	NA	R	T	-	-	-	-	
620639	Rowley Way, London	20	0.07	0.03	-	36	NA	R	T	-	-	-	-	
620640	Ainsworth Way, London	20	0.06	0.03	-	12	NA	R	T	-	-	-	-	
620642	Ainsworth Way, London	15	0.05	0.02	-	46	NA	R	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB L <sub>pASmax</sub>	VDV m/s <sup>1.75</sup> Daytime (07:00 - 23:00)	VDV m/s <sup>1.75</sup> Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
620643	Boundary Road, London	12	0.04	0.02	-	20	NA	R	T	-	-	-	-	
620644	Rowley Way, London	15	0.05	0.02	-	80	NA	R	T	-	-	-	-	
620692	Rowley Way, London	19	0.06	0.03	-	57	NA	R	T	-	-	-	-	
620693	Belsize Road, London	10	0.03	0.02	-	27	NA	R	T	-	-	-	-	
620694	Belsize Road, London	11	0.04	0.02	-	54	NA	R	T	-	-	-	-	
620696	Boundary Road, London	11	0.04	0.02	-	1	NA	R	T	-	-	-	-	
620697	Alexandra Place, London	19	0.06	0.03	-	46	NA	R	T	-	-	-	-	
620698	Alexandra Place, London	17	0.05	0.02	-	10	NA	R	T	-	-	-	-	
620699	Langtry Walk, London	15	0.05	0.02	-	1	NA	R	T	-	-	-	-	
620701	Loudoun Road, London	11	0.04	0.02	-	16	NA	R	T	-	-	-	-	
620702	Alexandra Road, London	10	0.04	0.02	-	22	NA	R	T	-	-	-	-	
620703	Alexandra Place, London	9	0.03	0.02	-	12	NA	R	T	-	-	-	-	
620704	Boundary Road, London	11	0.04	0.02	-	60	NA	R	T	-	-	-	-	
620705	Boundary Road, London	8	0.03	0.02	-	10	NA	R	T	-	-	-	-	
620707	Loudoun Road, London (Also Committed Development Ref Cf3/38)	8	0.03	0.02	-	35(1)	NA	R(CD)	T	-	-	-	-	
620708	Alexandra Road, London (Also Committed Development Ref Cf3/36)	9	0.03	0.02	-	4(8)	NA	R(CD)	T	-	-	-	-	
620710	Hilgrove Road, London	13	0.04	0.02	-	30	NA	R	T	-	-	-	-	
620711	Hilgrove Road, London	15	0.05	0.02	-	20	NA	R	T	-	-	-	-	
620712	Alexandra Road, London	10	0.03	0.02	-	11	NA	R	T	-	-	-	-	
620713	Hilgrove Road, London	11	0.04	0.02	-	38	NA	R	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
620732	Dorman Way, London	8	0.03	0.02	-	56	NA	R	T	-	-	-	-	
620733	Alexandra Road, London	10	0.04	0.02	-	11	NA	R	T	-	-	-	-	
620734	Alexandra Road, London	9	0.03	0.02	-	11	NA	R	T	-	-	-	-	
620735	Hilgrove Road, London	15	0.05	0.02	-	9	NA	R	T	-	-	-	-	
620736	Hilgrove Road, London	19	0.06	0.03	-	54	NA	R	T	-	-	-	-	
620737	Finchley Road, Swiss Cottage	16	0.05	0.02	-	110	NA	R	T	-	-	-	-	
620738	Finchley Road, London	14	0.05	0.02	-	1	NA	R	T	-	-	-	-	
620739	Finchley Road, London	15	0.05	0.03	-	12	NA	R	T	-	-	-	-	
620741	Dobson Close, London	14	0.05	0.02	-	24	NA	R	T	-	-	-	-	
620742	Dobson Close, London	12	0.04	0.02	-	8	NA	R	T	-	-	-	-	
620745	Avenue Road, London	16	0.05	0.03	-	11	NA	R	T	-	-	-	-	
620746	Dobson Close, London	11	0.04	0.02	-	10	NA	R	T	-	-	-	-	
620747	Dobson Close, London	9	0.03	0.02	-	10	NA	R	T	-	-	-	-	
620749	Dobson Close, London	10	0.03	0.02	-	6	NA	R	T	-	-	-	-	
620750	Finchley Road, London	10	0.03	0.02	-	10	NA	R	T	-	-	-	-	
620751	Finchley Road, London	9	0.03	0.02	-	38	NA	R	T	-	-	-	-	
620763	Winchester Mews, London	13	0.04	0.02	-	22	NA	R	T	-	-	-	-	
620765	Winchester Road, Belsize	18	0.05	0.03	-	144	NA	R	T	-	-	-	-	
620769	Fellows Road, London	13	0.05	0.02	-	43	NA	R	T	-	-	-	-	
620770	Winchester Road, London	18	0.05	0.03	-	52	NA	R	T	-	-	-	-	
620771	Adelaide Road, London	8	0.03	0.02	-	161	NA	R	T	-	-	-	-	
620776	Fellows Road, London	15	0.04	0.02	-	11	NA	R	T	-	-	-	-	



Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
620777	Fellows Road, London	13	0.04	0.02	-	19	NA	R	T	-	-	-	-	
620778	Fellows Road, London	14	0.04	0.02	-	17	NA	R	T	-	-	-	-	
620779	Winchester Road, London	16	0.05	0.03	-	3	NA	R	T	-	-	-	-	
620780	Winchester Road, London	14	0.04	0.02	-	43	NA	R	T	-	-	-	-	
620783	Winchester Road, London	10	0.03	0.02	-	37	NA	R	T	-	-	-	-	
620785	Hornby Close, London	11	0.03	0.02	-	27	NA	R	T	-	-	-	-	
620786	Fellows Road, London	16	0.04	0.02	-	181	NA	R	T	-	-	-	-	
620787	Fellows Road, London	16	0.04	0.02	-	30	NA	R	T	-	-	-	-	
620788	Huson Close, London	17	0.04	0.02	-	14	NA	R	T	-	-	-	-	
620789	Fellows Road, London	13	0.04	0.02	-	166	NA	R	T	-	-	-	-	
620790	Briary Close, London	12	0.03	0.02	-	30	NA	R	T	-	-	-	-	
620791	Huson Close, London	9	0.03	0.01	-	18	NA	R	T	-	-	-	-	
620792	Huson Close, London	8	0.03	0.01	-	12	NA	R	T	-	-	-	-	
620793	Huson Close, London	14	0.04	0.02	-	16	NA	R	T	-	-	-	-	
620794	Eton Avenue, London	8	0.03	0.01	-	33	NA	R	T	-	-	-	-	
620795	Kings College Road, London	10	0.03	0.02	-	8	NA	R	T	-	-	-	-	
620796	Fellows Road, London	16	0.05	0.02	-	30	NA	R	T	-	-	-	-	
620797	Fellows Road, London	14	0.04	0.02	-	41	NA	R	T	-	-	-	-	
620798	Eton Avenue, London	8	0.03	0.01	-	22	NA	R	T	-	-	-	-	
620799	Fellows Road, London	11	0.03	0.02	-	9	NA	R	T	-	-	-	-	
620800	Brocas Close, London	12	0.03	0.02	-	7	NA	R	T	-	-	-	-	
620801	Brocas Close, London	18	0.04	0.02	-	7	NA	R	T	-	-	-	-	
620802	Brocas Close, London	11	0.03	0.01	-	6	NA	R	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
620803	Brocas Close, London	9	0.03	0.01	-	8	NA	R	T	-	-	-	-	
620804	Adelaide Road, London	11	0.03	0.02	-	158	NA	R	T	-	-	-	-	
620806	Elliott Square, London	5	0.02	0.01	-	8	NA	R	T	-	-	-	-	
620816	Merton Rise, London	12	0.03	0.02	-	15	NA	R	T	-	-	-	-	
620817	Fellows Road, London	10	0.03	0.01	-	15	NA	R	T	-	-	-	-	
620818	Fellows Road, London	9	0.03	0.01	-	15	NA	R	T	-	-	-	-	
620819	Fellows Road, London	7	0.02	0.01	-	11	NA	R	T	-	-	-	-	
620820	Merton Rise, London	9	0.03	0.01	-	1	NA	R	T	-	-	-	-	
620821	Merton Rise, London	7	0.02	0.01	-	4	NA	R	T	-	-	-	-	
620824	Quickswood, London	8	0.02	0.01	-	8	NA	R	T	-	-	-	-	
620825	Quickswood, London	7	0.02	0.01	-	9	NA	R	T	-	-	-	-	
620826	Quickswood, London	6	0.02	0.01	-	4	NA	R	T	-	-	-	-	
620827	Adelaide Road, London	17	0.04	0.02	-	18	NA	R	T	-	-	-	-	
620828	Tobin Close, London	11	0.03	0.02	-	8	NA	R	T	-	-	-	-	
620830	Primrose Hill Road, London	11	0.03	0.02	-	48	NA	R	T	-	-	-	-	
620831	Fellows Road, London	17	0.04	0.02	-	7	NA	R	T	-	-	-	-	
620832	Fellows Road, London	13	0.03	0.02	-	7	NA	R	T	-	-	-	-	
620852	Fellows Road, London	6	0.02	0.01	-	15	NA	R	T	-	-	-	-	
620855	Fellows Road, London	14	0.03	0.02	-	12	NA	R	T	-	-	-	-	
620856	Primrose Hill Road, London	13	0.03	0.02	-	31	NA	R	T	-	-	-	-	
620857	Adelaide Road, London	12	0.03	0.02	-	16	NA	R	T	-	-	-	-	
620859	Adelaide Road, London	11	0.03	0.01	-	73	NA	R	T	-	-	-	-	
620860	Adelaide Road, London	14	0.03	0.02	-	6	NA	R	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB L <sub>pASmax</sub>	VDV m/s <sup>1.75</sup> Daytime (07:00 - 23:00)	VDV m/s <sup>1.75</sup> Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
620861	Adelaide Road, London (Also Committed Development Ref CFA3/24)	13	0.03	0.02	-	1(9)	NA	R(CD)	T	-	-	-	-	
620862	Adelaide Road, London	14	0.03	0.02	-	2	NA	R	T	-	-	-	-	
620863	Adelaide Road, London	16	0.04	0.02	-	2	NA	R	T	-	-	-	-	
620864	Adelaide Road, London	19	0.04	0.02	-	8	NA	R	T	-	-	-	-	
620865	Adelaide Road, London	17	0.04	0.02	-	2	NA	R	T	-	-	-	-	
620866	Adelaide Road, London	17	0.04	0.02	-	2	NA	R	T	-	-	-	-	
620867	Fellows Road, London	8	0.02	0.01	-	16	NA	R	T	-	-	-	-	
620868	Fellows Road, London	7	0.02	0.01	-	17	NA	R	T	-	-	-	-	
620869	Fellows Road, London	9	0.02	0.01	-	3	NA	R	T	-	-	-	-	
620870	Fellows Road, London	8	0.02	0.01	-	3	NA	R	T	-	-	-	-	
620871	Fellows Road, London	6	0.02	0.01	-	37	NA	R	T	-	-	-	-	
620873	King Henrys Road, London	8	0.02	0.01	-	23	NA	R	T	-	-	-	-	
620874	King Henrys Road, London	13	0.03	0.01	-	14	NA	R	T	-	-	-	-	
620875	King Henrys Road, London	20	0.05	0.02	-	10	NA	R	T	-	-	-	-	
620877	Beaumont Walk, London	11	0.03	0.01	-	16	NA	R	T	-	-	-	-	
620878	Beaumont Walk, London	8	0.02	0.01	-	6	NA	R	T	-	-	-	-	
620879	Provost Road, London	6	0.02	0.01	-	1	NA	R	T	-	-	-	-	
620880	Beaumont Walk, London	8	0.02	0.01	-	6	NA	R	T	-	-	-	-	
620881	Beaumont Walk, London	7	0.02	0.01	-	6	NA	R	T	-	-	-	-	
620882	Beaumont Walk, London	9	0.02	0.01	-	5	NA	R	T	-	-	-	-	
620883	Beaumont Walk, London	9	0.02	0.01	-	6	NA	R	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB L <sub>pASmax</sub>	VDV m/s <sup>1.75</sup> Daytime (07:00 - 23:00)	VDV m/s <sup>1.75</sup> Night time (23:00 – 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
620884	Eton Road, London	8	0.02	0.01	-	7	NA	R	T	-	-	-	-	
620886	Fellows Road, London	6	0.02	0.01	-	4	NA	R	T	-	-	-	-	
620897	Primrose Hill Road, London	6	0.02	0.01	-	4	NA	R	T	-	-	-	-	
620900	Quickwood, London	6	0.02	0.01	-	4	NA	R	T	-	-	-	-	
620901	Quickwood, London	5	0.02	0.01	-	3	NA	R	T	-	-	-	-	
621153	Hornby Close, London	12	0.04	0.02	-	4	NA	R	T	-	-	-	-	
621155	St. Johns Wood Park, London	8	0.03	0.01	-	50	NA	R	T	-	-	-	-	
621159	Alexandra Road, London	15	0.04	0.02	-	18	NA	R	T	-	-	-	-	
621178	Abbey Road, London	20	0.06	0.03	-	12	NA	R	T	-	-	-	-	
621179	Abbey Road, London	21	0.07	0.04	-	17	NA	R	T	-	-	-	-	
621180	Abbey Road, London	14	0.05	0.02	-	14	NA	R	T	-	-	-	-	
621181	Abbey Road, London	12	0.04	0.02	-	15	NA	R	T	-	-	-	-	
621182	Abbey Road, London	20	0.06	0.03	-	17	NA	R	T	-	-	-	-	
621183	Abbey Road, London	20	0.06	0.03	-	14	NA	R	T	-	-	-	-	
621184	Abbey Road, London	12	0.04	0.02	-	12	NA	R	T	-	-	-	-	
621185	Abbey Road, London	12	0.04	0.02	-	14	NA	R	T	-	-	-	-	
621715	Prince Albert Road, London	8	0.02	0.01	-	1	NA	R	T	-	-	-	-	
621716	Gloucester Avenue, London	14	0.03	0.01	-	9	NA	R	T	-	-	-	-	
621717	Gloucester Avenue, London	9	0.02	0.01	-	5	NA	R	T	-	-	-	-	
621718	Prince Albert Road, London	7	0.02	0.01	-	1	NA	R	T	-	-	-	-	
621719	Gloucester Avenue, London	12	0.02	0.01	-	12	NA	R	T	-	-	-	-	
621720	Prince Albert Road, London	5	0.01	0.01	-	1	NA	R	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
621721	Regal Lane, London	7	0.02	0.01	-	4	NA	R	T	-	-	-	-	
621722	Regal Lane, London	7	0.02	0.01	-	5	NA	R	T	-	-	-	-	
621723	Regal Lane, London	6	0.01	0.01	-	2	NA	R	T	-	-	-	-	
621726	Gloucester Avenue, London	10	0.02	0.01	-	1	NA	R	T	-	-	-	-	
621732	Gloucester Avenue, London	10	0.02	0.01	-	41	NA	R	T	-	-	-	-	
621733	Gloucester Avenue, London	6	0.02	0.01	-	5	NA	R	T	-	-	-	-	
621734	Gloucester Avenue, London	21	0.04	0.02	-	16	NA	R	T	-	-	-	-	
621736	Parkway, London	10	0.03	0.02	-	15	NA	R	T	-	-	-	-	
621739	Parkway, London	3	0.02	0.01	-	6	NA	R	T	-	-	-	-	
621741	Oval Road, London	8	0.02	0.01	-	12	NA	R	T	-	-	-	-	
621743	Parkway, London	6	0.02	0.01	-	5	NA	R	T	-	-	-	-	
621744	Gloucester Crescent, London	5	0.02	0.01	-	3	NA	R	T	-	-	-	-	
621745	Parkway, London	3	0.02	0.01	-	11	NA	R	T	-	-	-	-	
621749	Gloucester Crescent, London	3	0.01	0.01	-	6	NA	R	T	-	-	-	-	
621750	Regents Park Terrace, London	4	0.01	0.01	-	35	NA	R	T	-	-	-	-	
621751	Oval Road, London	10	0.02	0.01	-	6	NA	R	T	-	-	-	-	
621752	Oval Road, London	10	0.02	0.01	-	4	NA	R	T	-	-	-	-	
621753	Oval Road, London	8	0.02	0.01	-	15	NA	R	T	-	-	-	-	
621760	Gloucester Avenue, London	21	0.04	0.02	-	44	NA	R	T	-	-	-	-	
621761	Gloucester Avenue, London	21	0.04	0.02	-	44	NA	R	T	-	-	-	-	
621763	Gloucester Avenue, Camden Town With Primrose Hill	19	0.04	0.02	-	1	NA	R	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
621764	Gloucester Avenue, London	12	0.02	0.01	-	10	NA	R	T	-	-	-	-	
621765	Gloucester Avenue, London	11	0.02	0.01	-	9	NA	R	T	-	-	-	-	
621766	Gloucester Avenue, London	13	0.02	0.01	-	3	NA	R	T	-	-	-	-	
621767	Oval Road, London	8	0.02	0.01	-	1	NA	R	T	-	-	-	-	
621769	Oval Road, London	8	0.02	0.01	-	172	NA	R	T	-	-	-	-	
621770	Oval Road, London	6	0.02	0.01	-	12	NA	R	T	-	-	-	-	
621782	Gilbeys Yard, London	8	0.02	0.01	-	11	NA	R	T	-	-	-	-	
621784	Gilbeys Yard, London	7	0.02	0.01	-	26	NA	R	T	-	-	-	-	
621792	St. Marks Crescent, London	9	0.02	0.01	-	3	NA	R	T	-	-	-	-	
621793	St. Marks Crescent, London	7	0.02	0.01	-	6	NA	R	T	-	-	-	-	
621796	Gloucester Avenue, London	17	0.03	0.02	-	5	NA	R	T	-	-	-	-	
621797	St. Marks Crescent, London	12	0.02	0.01	-	5	NA	R	T	-	-	-	-	
621798	St. Marks Crescent, London	8	0.02	0.01	-	9	NA	R	T	-	-	-	-	
621802	Waterside Place, London	18	0.03	0.02	-	6	NA	R	T	-	-	-	-	
621803	Waterside Place, London	12	0.02	0.01	-	4	NA	R	T	-	-	-	-	
621804	Princess Road, London	9	0.02	0.01	-	6	NA	R	T	-	-	-	-	
621812	Gloucester Avenue, London	14	0.03	0.01	-	3	NA	R	T	-	-	-	-	
621813	Edis Street, London	10	0.02	0.01	-	7	NA	R	T	-	-	-	-	
621814	Princess Road, London	12	0.02	0.01	-	10	NA	R	T	-	-	-	-	
621815	Princess Road, London	7	0.02	0.01	-	7	NA	R	T	-	-	-	-	
621816	Edis Street, London	7	0.02	0.01	-	8	NA	R	T	-	-	-	-	
621820	Gloucester Avenue, London	22	0.05	0.02	-	6	NA	R	T	-	-	-	-	
621822	Gloucester Avenue, London	11	0.02	0.01	-	13	NA	R	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
621823	Gloucester Avenue, London	10	0.02	0.01	-	21	NA	R	T	-	-	-	-	
621824	Fitzroy Road, London	7	0.02	0.01	-	4	NA	R	T	-	-	-	-	
621833	Edis Street, London	9	0.02	0.01	-	10	NA	R	T	-	-	-	-	
621834	Gloucester Avenue, London	18	0.03	0.02	-	22	NA	R	T	-	-	-	-	
621835	Sunny Mews, London	24	0.05	0.03	-	6	NA	R	T	-	-	-	-	
621843	Fitzroy Road, London	7	0.02	0.01	-	6	NA	R	T	-	-	-	-	
621847	Berkley Grove, London	7	0.02	0.01	-	15	NA	R	T	-	-	-	-	
621852	Gloucester Avenue, London	8	0.02	0.01	-	31	NA	R	T	-	-	-	-	
621853	Gloucester Avenue, London	10	0.02	0.01	-	9	NA	R	T	-	-	-	-	
621854	Berkley Grove, London	7	0.02	0.01	-	1	NA	R	T	-	-	-	-	
621856	Regents Park Road, London	8	0.02	0.01	-	6	NA	R	T	-	-	-	-	
621858	Regents Park Road, London	12	0.03	0.01	-	8	NA	R	T	-	-	-	-	
621859	Regents Park Road, London	16	0.03	0.02	-	3	NA	R	T	-	-	-	-	
621863	Regents Park Road, London	8	0.02	0.01	-	7	NA	R	T	-	-	-	-	
621865	King Henrys Road, London	7	0.02	0.01	-	6	NA	R	T	-	-	-	-	
621866	King Henrys Road, London	11	0.03	0.01	-	9	NA	R	T	-	-	-	-	
621867	Regents Park Road, London	20	0.05	0.02	-	21	NA	R	T	-	-	-	-	
621869	King Henrys Road, London	20	0.04	0.02	-	5	NA	R	T	-	-	-	-	
621871	Gloucester Avenue, London	20	0.04	0.02	-	1	NA	R	T	-	-	-	-	
621872	Gloucester Avenue, London	17	0.03	0.02	-	38	NA	R	T	-	-	-	-	
621873	Gloucester Avenue, London	17	0.04	0.02	-	2	NA	R	T	-	-	-	-	
621874	Gloucester Avenue, London	22	0.05	0.02	-	4	NA	R	T	-	-	-	-	
621893	Provost Road, London	5	0.02	0.01	-	9	NA	R	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
621895	Adelaide Road, London	11	0.03	0.01	-	11	NA	R	T	-	-	-	-	
621896	Adelaide Road, London	8	0.02	0.01	-	30	NA	R	T	-	-	-	-	
621897	Adelaide Road, London	5	0.02	0.01	-	36	NA	R	T	-	-	-	-	
621898	Regents Park Road, London	12	0.03	0.01	-	5	NA	R	T	-	-	-	-	
621906	Regents Park Road, London	4	0.02	0.01	-	12	NA	R	T	-	-	-	-	
700452	Primrose Hill Road, London	18	0.04	0.02	-	1	NA	R	T	-	-	-	-	
700453	Eton Road, London	8	0.02	0.01	-	8	NA	R	T	-	-	-	-	
620573	Kilburn High Road, London, (Café)	23	0.09	0.04	-	1	B	G4/V3	T	-	-	-	-	
620574	Kilburn High Road, London, (General Commercial)	16	0.05	0.03	-	1	B	G4/V3	T	-	-	-	-	
620578	Belsize Road, London, (Office)	9	0.04	0.02	-	6	B	G4/V3	T	-	-	-	-	
620578	Belsize Road, London, (Office)	9	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620578	Belsize Road, London, (Office)	9	0.04	0.02	-	10	B	G4/V3	T	-	-	-	-	
620578	Belsize Road, London, (Café)	9	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620578	Kilburn High Road, London, (Shopping)	9	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620578	Kilburn High Road, London, (Bank)	9	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620578	Kilburn High Road, London, (Building Society)	9	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620578	I S Cohen Optometrist,	9	0.04	0.02	-	1	B	G4/V2	T	-	-	-	-	



Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
	Kilburn High Road, London, (Clinic)													
620578	Shape Dental Clinic, Kilburn High Road, London, (Dental Surgery)	9	0.04	0.02	-	1	B	G4/V2	T	-	-	-	-	
620578	Kilburn High Road, London, (General Commercial)	9	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620578	Belsize Road, London, (General Commercial)	9	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620578	Belsize Road, London, (General Commercial)	9	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620586	Kilburn High Road, London, (Youth Centre)	15	0.05	0.03	-	2	B	G3/V3	T	-	-	-	-	
620591	Regents Plaza, Kilburn High Road, London, (General Commercial)	11	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620605	Belsize Road, London, (General Commercial)	10	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620605	Belsize Road, London, (General Commercial)	10	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620607	Langtry Road, London, (General Commercial)	12	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620608	Langtry Road, London, (General Commercial)	12	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620625	Abbey Road, London, (General Commercial)	17	0.06	0.03	-	1	B	G4/V3	T	-	-	-	-	
620626	Medical Centre, Abbey Road, London, (Health	10	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB L <sub>pASmax</sub>	VDV m/s <sup>1.75</sup> Daytime (07:00 - 23:00)	VDV m/s <sup>1.75</sup> Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
	Centre)													
620627	Boundary Road, London, (Restaurant)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	St. Johns Wood School Of English, Boundary Road, London, (Language Studies)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	2	B	G4/V3	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	Boundary Gallery, Boundary Road, London, (Art Gallery)	9	0.03	0.02	-	1	B	G3/V3	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	The Dental Practice, Boundary Road, London, (Dental Surgery)	9	0.03	0.02	-	1	B	G4/V2	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
620627	Hamilton Veterinary Clinic, Boundary Road, London, (Veterinary Surgery)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620627	Boundary Road, London, (General Commercial)	9	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620642	Linnell House, Boundary Road, London, (General Commercial)	15	0.05	0.02	-	1	B	G4/V3	T	-	-	-	-	
620650	Boundary Road, London, (Research)	8	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620692	Rowley Way, London, (General Commercial)	19	0.06	0.03	-	1	B	G4/V3	T	-	-	-	-	
620692	Langtry Walk, London, (General Commercial)	19	0.06	0.03	-	1	B	G4/V3	T	-	-	-	-	
620695	Jack Taylor School, Ainsworth Way, London, (School)	15	0.05	0.02	-	1	B	G4/V3	T	-	-	-	-	
620696	St. John's Wood Care Centre, Boundary Road, London, (Day Care)	11	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
620701	Loudoun Road, London, (General Commercial)	11	0.04	0.02	-	3	B	G4/V3	T	-	-	-	-	
620702	Ready Steady Go Nursery, Alexandra Road, London, (Pre School Education)	10	0.04	0.02	-	2	B	G4/V3	T	-	-	-	-	
620709	South Hampstead Railway	20	0.07	0.03	-	1	B	G4/V3	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
	Station, Loudoun Road, London, (General Commercial)													
620737	Regency Parade, Finchley Road, London, (Surgery)	16	0.05	0.02	-	11	B	G4/V2	T	-	-	-	-	
620738	Odeon Cinema, Finchley Road, London, (Cinema)	14	0.05	0.02	-	1	B	G3/V3	T	-	-	-	-	
620740	Swiss Cottage Library, Avenue Road, London, (Library)	11	0.04	0.02	-	2	B	G4/V3	T	-	-	-	-	
620744	Avenue Road, London, (Office)	17	0.06	0.03	-	11	B	G4/V3	T	-	-	-	-	
620745	Lebanese Maronite Church, Dobson Close, London, (Church)	16	0.05	0.03	-	1	B	G3/V3	T	-	-	-	-	
620750	Finchley Road, London, (General Commercial)	10	0.03	0.02	-	2	B	G4/V3	T	-	-	-	-	
620750	Finchley Road, London, (Restaurant)	10	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620751	Finchley Road, London, (Bank)	9	0.03	0.02	-	6	B	G4/V3	T	-	-	-	-	
620763	Winchester Mews, London, (Surgery)	13	0.04	0.02	-	1	B	G4/V2	T	-	-	-	-	
620765	Swiss Cottage Community Centre, Winchester Road, London, (Community Centre)	18	0.05	0.03	-	1	B	G3/V3	T	-	-	-	-	
620779	Winchester Road, London,	16	0.05	0.03	-	1	B	G4/V3	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
	(General Commercial)													
620779	Winchester Road, London, (General Commercial)	16	0.05	0.03	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
620779	Old Winchester Arms, Winchester Road, London, (General Commercial)	16	0.05	0.03	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
620779	Winchester Road, London, (General Commercial)	16	0.05	0.03	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
620779	Winchester Road, London, (General Commercial)	16	0.05	0.03	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
620783	Crossfield Road, London, (Office)	10	0.03	0.02	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
620783	Mora Burnett House, Winchester Road, London, (Office)	10	0.03	0.02	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
620785	Dental Surgery, Hornby Close, London, (Dental Surgery)	11	0.03	0.02	-	1	B	G <sub>4</sub> /V <sub>2</sub>	T	-	-	-	-	
620788	Fellows Road, London, (General Commercial)	17	0.04	0.02	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
620789	Bray Dental Practice, Bray Tower, Adelaide Road, London, (Dental Surgery)	13	0.04	0.02	-	1	B	G <sub>4</sub> /V <sub>2</sub>	T	-	-	-	-	
620794	Trevor Roberts Preparatory School, Eton Avenue, London, (Private Primary School)	8	0.03	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
620799	Swiss Cottage Hotel,	11	0.03	0.02	-	1	B	G <sub>4</sub> /V <sub>2</sub>	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
	Adamson Road, London, (Hotel)													
620799	Fellows Road, London, (Guest House)	11	0.03	0.02	-	1	B	G4/V2	T	-	-	-	-	
620807	Adelaide Road, London, (General Commercial)	5	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
620821	Eton Avenue, London, (General Commercial)	7	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
620822	Sarum Hall School, Eton Avenue, London, (School)	5	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
620854	The Britania Hotel, Primrose Hill Road, London, (Hotel)	16	0.04	0.02	-	1	B	G4/V2	T	-	-	-	-	
620858	Adelaide Road, London, (Car Dealer)	13	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620858	Adelaide Road, London, (Surgery)	13	0.03	0.02	-	1	B	G4/V2	T	-	-	-	-	
620861	Jamestown Mental Health Centre, Adelaide Road, London, (Health Centre)	13	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
620863	Adelaide Road, London, (General Commercial)	16	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
621209	Kilburn High Road, London, (General Commercial)	12	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
621209	Kilburn High Road Railway Station, Kilburn High Road, London, (General Commercial)	12	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
621713	Parkway, London,	15	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
	(Shopping)													
621714	North Bridge House School, Gloucester Avenue, London, (School)	19	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
621720	Prince Albert Road, London, (Office)	5	0.01	0.01	-	1	B	G4/V3	T	-	-	-	-	
621720	Nursery, Prince Albert Road, London, (Nursery)	5	0.01	0.01	-	1	B	G4/V3	T	-	-	-	-	
621736	Parkway, London, (General Commercial)	10	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
621736	Parkway, London, (General Commercial)	10	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
621736	Parkway, London, (General Commercial)	10	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
621739	Parkway, London, (Shopping)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621739	Parkway, London, (Restaurant)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621739	Novas Gallery, Parkway, London, (Art Gallery)	3	0.02	0.01	-	1	B	G3/V3	T	-	-	-	-	
621739	Parkway, London, (General Commercial)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621739	Parkway, London, (General Commercial)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621742	Parkway, London, (Estate Agency)	11	0.03	0.01	-	5	B	G4/V3	T	-	-	-	-	
621742	Parkway, London, (General	11	0.03	0.01	-	1	B	G4/V3	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
	Commercial)													
621743	Parkway, London, (General Commercial)	6	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621743	Parkway, London, (General Commercial)	6	0.02	0.01	-	2	B	G4/V3	T	-	-	-	-	
621745	Parkway, London, (General Commercial)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621745	Parkway, London, (General Commercial)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621745	Parkway Dental Care, Parkway, London, (Dental Surgery)	3	0.02	0.01	-	1	B	G4/V2	T	-	-	-	-	
621745	Parkway, London, (General Commercial)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621745	Parkway, London, (General Commercial)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621745	Parkway, London, (Café)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621745	Parkway, London, (General Commercial)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621745	Parkway, London, (Shopping)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621745	Parkway, London, (General Commercial)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621745	Parkway, London, (General Commercial)	3	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621749	Gloucester Crescent, London, (Office)	3	0.01	0.01	-	1	B	G4/V3	T	-	-	-	-	



Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
621753	Oval Road, London, (General Commercial)	8	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621763	Gloucester Avenue, London, (General Commercial)	19	0.04	0.02	-	5	B	G4/V3	T	-	-	-	-	
621767	Centric Close, Oval Road, London, (General Commercial)	8	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621767	Centric Close, Oval Road, London, (General Commercial)	8	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621767	Centric Close, Oval Road, London, (Shopping)	8	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621767	Centric Close, Oval Road, London, (General Commercial)	8	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621768	Cecil Sharp House, Regents Park Road, London, (Hall)	7	0.02	0.01	-	1	B	G3/V3	T	-	-	-	-	
621769	Indigo Film & Television, Oval Road, London, (Television Studio)	8	0.02	0.01	-	10	B	G2/V3	T	-	-	-	-	
621809	Gloucester Avenue, London, (Office)	17	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
621812	Gloucester Avenue, London, (General Commercial)	14	0.03	0.01	-	2	B	G4/V3	T	-	-	-	-	
621812	Gloucester Avenue, London, (Shopping)	14	0.03	0.01	-	1	B	G4/V3	T	-	-	-	-	
621812	Gloucester Avenue, London, (General Commercial)	14	0.03	0.01	-	2	B	G4/V3	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB L <sub>pASmax</sub>	VDV m/s <sup>1.75</sup> Daytime (07:00 - 23:00)	VDV m/s <sup>1.75</sup> Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
621812	Gloucester Avenue, London, (General Commercial)	14	0.03	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621812	Gloucester Avenue, London, (General Commercial)	14	0.03	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621813	Edis Street, London, (General Commercial)	10	0.02	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621820	Gloucester Avenue, London, (General Commercial)	22	0.05	0.02	-	2	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621821	The Courtyard, Gloucester Avenue, London, (General Commercial)	21	0.04	0.02	-	6	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621821	The Courtyard, Gloucester Avenue, London, (General Commercial)	21	0.04	0.02	-	3	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621821	The Courtyard, Gloucester Avenue, London, (General Commercial)	21	0.04	0.02	-	3	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621822	Gloucester Avenue, London, (General Commercial)	11	0.02	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621825	Utopia Village, Chalcot Road, London, (Research)	7	0.02	0.01	-	22	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621834	Gloucester Avenue, London, (General Commercial)	18	0.03	0.02	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621854	Berkeley Works, Berkley Grove, London, (General Commercial)	7	0.02	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621860	Regents Park Road, London, (General Commercial)	11	0.03	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
621861	Regents Park Road, London, (General Commercial)	11	0.03	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621862	Leeder House, Erskine Road, London, (General Commercial)	10	0.03	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621863	Regents Park Road, London, (Surgery)	8	0.02	0.01	-	1	B	G <sub>4</sub> /V <sub>2</sub>	T	-	-	-	-	
621863	Regents Park Road, London, (Restaurant)	8	0.02	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621863	Regents Park Road, London, (General Commercial)	8	0.02	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621863	Regents Park Road, London, (Office)	8	0.02	0.01	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621863	Regents Park Road, London, (General Commercial)	8	0.02	0.01	-	2	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621863	Leeder House, Erskine Road, London, (Office)	8	0.02	0.01	-	4	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621865	Leeder House, Erskine Road, London, (General Commercial)	7	0.02	0.01	-	2	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621867	Regents Park Road, London, (General Commercial)	20	0.05	0.02	-	2	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621868	Regents Park Road, London, (Shopping)	15	0.03	0.02	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621871	Gloucester Avenue, London, (Office)	20	0.04	0.02	-	43	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	
621871	Gloucester Avenue, London,	20	0.04	0.02	-	4	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 - 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
	(Shopping)													
621872	Primrose Hill Veterinary Clinic, Gloucester Avenue, London, (Veterinary Surgery)	17	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
621872	Gloucester Avenue, London, (Office)	17	0.03	0.02	-	2	B	G4/V3	T	-	-	-	-	
621872	Gloucester Avenue, London, (General Commercial)	17	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
621872	Gloucester Avenue, London, (Factory)	17	0.03	0.02	-	1	B	G4/V4	T	-	-	-	-	
621872	Gloucester Avenue, London, (General Commercial)	17	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
621872	Gloucester Avenue, London, (General Commercial)	17	0.03	0.02	-	1	B	G4/V3	T	-	-	-	-	
621873	Gloucester Avenue, London, (General Commercial)	17	0.04	0.02	-	1	B	G4/V3	T	-	-	-	-	
621874	Gloucester Avenue, London, (Office)	22	0.05	0.02	-	1	B	G4/V3	T	-	-	-	-	
621874	Gloucester Avenue, London, (General Commercial)	22	0.05	0.02	-	1	B	G4/V3	T	-	-	-	-	
621889	Iron Bridge House, Bridge Approach, London, (Office)	11	0.03	0.01	-	7	B	G4/V3	T	-	-	-	-	
621896	Adelaide Road, London, (General Commercial)	8	0.02	0.01	-	1	B	G4/V3	T	-	-	-	-	
621906	Regents Park Road, London, (Research)	-	0.02	0.01	-	10	B	G4/V3	T	-	-	-	-	

Assessment location		Impact criteria				Significance criteria								Significant effect
		Ground-borne sound level dB $L_{pASmax}$	VDV $m/s^{1.75}$ Daytime (07:00 - 23:00)	VDV $m/s^{1.75}$ Night time (23:00 – 07:00)	% increase or decrease in VDV	Number of impacts represented	Type of effect	Type of receptor	Receptor design	Existing environment	Unique feature	Combined impact	Mitigation of effect	
ID	Area represented													
700452	Englands Lane, London, (General Commercial)	18	0.04	0.02	-	1	B	G <sub>4</sub> /V <sub>3</sub>	T	-	-	-	-	

## Impact summary

- 4.3.3 The operational ground-borne noise and vibration impacts identified in Table 1 are summarised in Table 2.

Table 2: Summary of operational ground-borne noise and vibration impacts

	Number of ground-borne noise impacts			
	Low	Medium	High	Very High
Residential properties	o	o	o	o
Non-residential properties	o			o
	Number of ground-borne vibration impacts			
	Minor	Moderate	Major	Risk of building damage
Residential properties	o	o	o	o

## Airborne sound: direct impacts and effects

- 4.3.4 The route is in tunnel through this study area and therefore no operational airborne noise assessment has been undertaken.

## 4.4 Assessment of impacts and effects

### Residential receptors: direct effects

- 4.4.2 The assessment of operational noise and vibration indicates that significant direct effects on residential receptors are unlikely to occur in this area.

### Residential receptors: indirect effects

- 4.4.3 The transport assessment presented in Volume 5: Appendix TR-001-000, has been used to identify those roads or railways within this study area where the alignment remains as at present, but a change in flow or composition is identified which is greater than the screening criteria defined in Volume 5: Appendix SV-001-000. No roads or railways which exceed the criteria defined in Volume 5: Appendix SV-001-000 have been identified in this study area.
- 4.4.4 The assessment of operational noise and vibration indicates that significant indirect effects on residential receptors are unlikely to occur in this area.

### Non-residential receptors: direct effects

- 4.4.5 The assessment of operational noise and vibration indicates that significant direct effects on non-residential receptors are unlikely to occur in this area.

### **Non-residential receptors: indirect effects**

- 4.4.6 The transport assessment presented in Volume 5: Appendix TR-001-000, has been used to identify those roads or railways within this study area where the alignment remains as at present, but a change in flow or composition is identified which is greater than the screening criteria defined in Volume 5: Appendix SV-001-000. No roads or railways which exceed the criteria defined in Volume 5: Appendix SV-001-000 have been identified in this study area.
- 4.4.7 The assessment of operational noise and vibration indicates that significant indirect effects are unlikely to occur on non-residential receptors in this area.

### **Cumulative effects**

- 4.4.8 Details of properties being currently developed which were afforded planning approval before the safeguarding date are presented in Volume 5: Appendix CToo4-000. Within this area, the operational sound, noise or vibration associated with these developments in conjunction with the operation of the Proposed Scheme do not result in any significant cumulative effects.